SITE:	San Francisco - Pier 70 PG&E	LATITUDE:	37.46.0
HAZARD:	Facility		
		LONGITUDE:	122.22.9
VOLUME:	50,000 bbl		
DURATION:	3 days		

TRAJECTORY ANALYSIS

A spill trajectory envelope was calculated for the PG&E facility located at Pier 70 in San Francisco. The facility is located approximately one mile south of the San Francisco Bay Bridge. The analysis considered oil transport by the wind and tidal currents, and spreading of the oil spill by physical processes such as gravity, surface tension, and tidal dispersion. Spill transport on an ebbing tide would be expected to move the oil northward to and through the Golden Gate and out of San Francisco Bay. During this time physical spreading of a 50,000 bbl spill would carry the oil northward within San Francisco Bay to the Richmond area. A spill during the flood tide, when combined with physical spreading, would be expected to transport the oil southward into South San Francisco Bay as far Point San Bruno.

Wind-induced surface currents could cause additional transport of oil depending on the direction, strength, and persistence of local winds. Northerly winds, combined with physical spreading, could transport the oil into south San Francisco Bay as far as the San Mateo Bridge.

Any oil exiting San Francisco Bay would be expected to be transported either southward or northward depending on the direction of the wind. For oil that is transported outside the Bay, northerly winds could transport the oil as far as Point Montara after 3 days. Southerly winds outside the Bay could transport the oil northward as far as Point Reyes after 3 days.

These spill trajectory envelopes represent the outer perimeter of shoreside areas that could receive oil in the event of any spill. The envelopes are based on regional extremes of climate, tide, current, and wind and assume pessimistic dispersion and other adverse weather conditions. These trajectory envelopes do not represent the trajectory of any one spill. A full discussion of the details used for preparing these spill envelopes is provided in Section 202.2.